6. Troubleshooting

WARNING FOR HIGH VOLTAGE

4000 VOLTS EXIST AT THE HIGH VOLTAGE AREA. DO NOT OPERATE THE OVEN WITH CABINET PARTS REMOVED. DO NOT REMOVE THE CABINET PARTS IF THE POWER SUPPLY CORD IS PLUGGED IN THE WALL OUTLET. UNPLUG THE POWER CORD BEFORE SERVICING.

6-1 Electrical Malfunction

Parts	Cause	Diagnosis	Remedy
Fuse blows out when door is opened.	Defective primary interlock switch are winding.	Check continuity of the primary switch terminals with wire removed using a multimeter. If there is continuity inter between switch terminals when door is opened,the switch is defective.	Replace the primary interlock switch
	Defective interlock monitor switch	Check continuity of the monitor switch terminals with wire removed by using a multimeter. If there is continuity between switch terminals the door is closed, the switch is defective.	Replace the interlock monitor switch
Fuse is Open	Layer short of the secondary coil of H. V. Transformer	The fuse will not blow right away, but if it blows in a few seconds, then there is a layer short If the fuse blows with H. V. Trans secondary open, the transformer may be faulty.	Replace H. V.Transformer
Oven lamp does not light.	1) Fuse blown out	Check fuse.	Replace the fuse.
	2) Poor contact of power cord.	Check continuity of power supply cord. Also check whether the power cord is securely wired.	Adjust or replace the power supply cord
	3) Defective lamp	The fan motor rotates, but lamp does not light.	Replace the lamp.
	4) Defective timer contacts	Check the terminals of timer for continuity,turning the timer knob ON and OFF repeatedly.	Replace the timer.
	5) Thermal cutout S/W open	In this case the oven lamp and fan do not turn on	Replace the thermal cutout S/W
Fan does not operate.	1) Defective fan motor.	If 230V is found at motor terminals, the motor should be replaced.	Replace the motor.
	2) Defective contacts of timer	The oven lamp does not light and fan motor does not operate.	Replace the timer.

NOTE**:** Interlock monitor switch must be replaced when the fuse is blown out.

6-1 Electrical Malfunction(continued)

part	Cause	Diagnosis	Remedy
Microwave turns off during cooking cycle.	1) Too small a load	If a small amount of food is heated for a long time, period of microwave may turn off during operation.	To increase the oven water into water into the oven.
	2)Defective magnetron thermal cutout S/W	Check to see if the magnetron thermal cutout switch is activated at a temperature higher than 150℃.	Replace thermal cutout switch.
properly shock is felt.	In complete grounding	Make sure that grounding of the power supply cord has been done properly.	Rewire.
Door doe not operate properly	1) Broken door hinges	Remove the cabinet for inspection. Check the door hinge.	Replace door hinges.
	2) Missing or loose screw	Check if the screws are secured well to the door hinge.	Fasten or tighten.
Timer does not operate.	1) Defective timer motor	If the timer does not operate with 230V applied to the terminals, the timer motor amy be faulty.	Replace timer.
	2) Defective contacts of timer S/W	The lamp does not light.	Replace timer
Cooking tray does not rotate.	1) Defective drive motor	Check to see if 230V exists at the motor terminals.If so, motor will be defective.	Replace drive motor.
	1) Blocking of the ventilatior	Check if the air inlet or outlet ventilation is blocked by the wall or other objects.	Keep a distance of 100mm from the wall or the objects.
Magnetron thermal cutout switch OFF	2) Defective fan motor	If the fan motor does not operate with 230V applied to the terminal, the motor may be faulty.	Replace fan motor.
	3) Too small a load or no load	If a small amount of food is heated repeatedly over a long period of time, microwave turns off during operation.	To increase the oven load, place a glass of water into the oven.

6-2 Unsatisfactory Cooking

Parts	Cause	Diagnosis	Remedy
Food is not heated.	1) Open cathode of magnetron	Check the terminals with a multimeter to see if the heater circuit is open.	Replace magnetron.
	2) Defective H. V. Diode	Check the H. V. Diode for continuity in the reverse and normal directions using megger. If there is continuity in the reverse direction, the H. V. Diode may be faulty. (In this event H. V. Capacitor will be hot)	Replace H. V. Diode.
	3) Shorted magnetron	Connect megger leads to quick-connect terminal & body of the magnetron if there is continuity, the magnetron may be fuse will be blown) faulty. (In this case the main fuse will be blown)	Replace magnetron.
	4) Defective magnetron	If there is a crack in the magnetron antenna (dome), the magnetron is defective.	Replace magnetron.
	5) Poor contact of primary interlock switch	Check if the screws are secured well to the door hinge. and pressing it ON and OFF repeatedly.	Replace or adjust.
	6) Open coil of H. V. Trans-former	Check the continuity of primary coil and secondary coil. If there is no continuity, H. V. Transformer is defective.	Replace the H. V. Transformer.
	7) Shorted H. V. capacitor	Check the continuity of capacitor. If the capacitor shorts, the fuse blows	Replace the H. V. Capacitor.
	8) Monitor fuse blown out	Check the monitor fuse (on the noise filter)	Replace the Monitor fuse

6-3 Part Check List

Symptom	Related Parts	Check Points	Remedy
Microwave cooking does not work.	H.V.Transformer	1) Check if the primary and secondary coil is open or shorted. * Resistance of primary coil: . 1.64Ω Approx Resistance of secondary coil: Approx. 136.5Ω 2) Check if the MGT Heater Voltage is approx. 3.3V AC. **Caution : High voltage !**	Replace.
	H.V.Capacitor	Check continuity of capacitor between two terminals with H.V.wire lead removed. The resistance should be approx. 10MΩ, it's failure..	Replace.
	H.V.Diode	1) If there is no continuity in forward, direction the H.V.Diode is open. 2) If there is continuity in reverse direction, it's shorted.	Replace.
Fan motor does not rotate.	Fan motor	Check if the motor coil is open.	Replace.